

**WHAT IS CLAIMED IS:**

1. An isolated antimicrobial peptide having an amino acid sequence selected from the group consisting of:

KWKSFIKKLTSAAKKVVTAKPLALIS	(SEQ ID NO:3);
KWKSFIKKLTKAACKVVTAKKPLIV	(SEQ ID NO:4);
KWKKFIKSLTKSAAKTVVKTAKKPLIV	(SEQ ID NO:5);
KWKLFKKIGIGAVLKVLKVLTTGLPALKLTLK	(SEQ ID NO:6);
KLFFKKIGIGAVLKVLKVLTTGLPALKLTLK	(SEQ ID NO:7);
KWKFFKKIGIGAVLKVLKVLTTGLPALKLTLK	(SEQ ID NO:8);
KLWKLFFKKIGIGAVLKVLKVLTTGLPALKLTLK	(SEQ ID NO:9);
KWKSFIKKLTSAAKKVTTAAKPLTK	(SEQ ID NO:10);
KWKKFIKKIGIGAVLKVLTTGLPALKLTKK	(SEQ ID NO:11);
KKWKKFIKKIGIGAVLTTPGAKK	(SEQ ID NO:12);
GWGSFFKKAAHVGKHVGKAALTHYL-NH <sub>2</sub>	(SEQ ID NO:14);
KGWGSFFKKAAHVGKHVGKAALTHYL	(SEQ ID NO:15);
KGWGSFFKKAAHVGKHVGKAALTHYL-NH <sub>2</sub>	(SEQ ID NO:16);
ALWKTMLKKAHVGKHVGKAALTHYL-NH <sub>2</sub>	(SEQ ID NO:17);
SIGSAFKKAAHVGKHVGKAALTHYL-NH <sub>2</sub>	(SEQ ID NO:18);
GWGSFFKKAAHVGKHVGKAALGAAARRRK	(SEQ ID NO:19);
ALWKTMLKKAHVGKHVGKAALGAAARRRK	(SEQ ID NO:20); and
SIGSAFKKAAHVGKHVGKAALGAAARRRK	(SEQ ID NO:21);

and analogs, derivatives, amidated variations and conservative variations thereof.

2. An isolated polynucleotide which encodes a peptide of claim 1.

3. An isolated polynucleotide which encodes a peptide selected from the group consisting of:

KWKSFIKKLTSAACKVVTTAKPLALIS	(SEQ ID NO:3);
KWKSFIKKLTAAKKVVTTAKKPLIV	(SEQ ID NO:4);
KWKKFIKSLTKSAAKTVVKTAKKPLIV	(SEQ ID NO:5);
KWKLFKKIGIGAVLKVLKVLTTGLPALKLTLK	(SEQ ID NO:6);
KLFFKKIGIGAVLKVLKVLTTGLPALKLTLK	(SEQ ID NO:7);
KWKFFKKIGIGAVLKVLKVLTTGLPALKLTLK	(SEQ ID NO:8);
KLWKLFFKKIGIGAVLKVLKVLTTGLPALKLTLK	(SEQ ID NO:9);
KWKSFIKKLTSAACKVTTAAKPLTK	(SEQ ID NO:10);
KWKKFIKKIGIGAVLKVLTTGLPALKLTKK	(SEQ ID NO:11);
KKWKKFIKKIGIGAVLTTPGAKK	(SEQ ID NO:12);
GWGSFFKKAAHVGKHVGKAALTHYL	(SEQ ID NO:14);
KGWGSFFKKAAHVGKHVGKAALTHYL	(SEQ ID NO:15);
ALWKTMLKAAHVGKHVGKAALTHYL	(SEQ ID NO:17);
SIGSAFKKAAHVGKHVGKAALTHYL	(SEQ ID NO:18);
GWGSFFKKAAHVGKHVGKAALGAAARRRK	(SEQ ID NO:19);
ALWKTMLKAAHVGKHVGKAALGAAARRRK	(SEQ ID NO:20); and
SIGSAFKKAAHVGKHVGKAALGAAARRRK	(SEQ ID NO:21).

4. A method of inhibiting the growth of bacteria or, a virus comprising contacting the bacteria with an inhibiting effective amount of a peptide having an amino acid sequence selected from the group consisting of:

KWKSFIKKLTSAKKVVTTAKPLALIS	(SEQ ID NO:3);
KWKSFIKKLTKAACKVVTTAKKPLIV	(SEQ ID NO:4);
KWKKFIKSLTKSAAKTVVKTAKKPLIV	(SEQ ID NO:5);
KWKLFKKIGIGAVLKVLKVLTTGLPALKLTLK	(SEQ ID NO:6);
KLFFKKIGIGAVLKVLKVLTTGLPALKLTLK	(SEQ ID NO:7);
KWKFFKKIGIGAVLKVLKVLTTGLPALKLTLK	(SEQ ID NO:8);
KLWKLFFKKIGIGAVLKVLKVLTTGLPALKLTLK	(SEQ ID NO:9);
KWKSFIKKLTSAKKVTTAAKPLTK	(SEQ ID NO:10);
KWKKFIKKIGIGAVLKVLTTGLPALKLTKK	(SEQ ID NO:11);
KKWKKFIKKIGIGAVLTPGAKK	(SEQ ID NO:12);
GWGSFFKKAHVGKHVGKAALTHYL-NH <sub>2</sub>	(SEQ ID NO:14);
KGWGSFFKKAHVGKHVGKAALTHYL	(SEQ ID NO:15);
KGWGSFFKKAHVGKHVGKAALTHYL-NH <sub>2</sub>	(SEQ ID NO:16);
ALWKTMLKKAHVGKHVGKAALTHYL-NH <sub>2</sub>	(SEQ ID NO:17);
SIGSAFKKAHVGKHVGKAALTHYL-NH <sub>2</sub>	(SEQ ID NO:18);
GWGSFFKKAHVGKHVGKAALGAAARRRK	(SEQ ID NO:19);
ALWKTMLKKAHVGKHVGKAALGAAARRRK	(SEQ ID NO:20); and
SIGSAFKKAHVGKHVGKAALGAAARRRK	(SEQ ID NO:21);

and analogs, derivatives, amidated variations and conservative variations thereof.

5. The method of claim 4, wherein the bacteria is gram positive.
6. The method of claim 5, wherein the bacteria is selected from the group consisting of *Staphylococcus typhimurium*, *Staphylococcus aureus*, *Listeria monocytogenes*, *Corynebacterium xerosis*, *Streptococcus pyogenes*, *Streptococcus pneumoniae*, *Streptococcus mitis* and *Staphylococcus epidermidis*.

7. The method of claim 4, wherein the bacteria is gram negative.
8. The method of claim 7, wherein the bacteria is selected from the group consisting of *Escherichia coli*, *Pseudomonas aeruginosa*, *Enterobacter faecalis*, *Salmonella typhimurium*, *Salmonella typhimurium phoP phoQ*, *Aeromonas salmonicida*, *Vibrio anguillarum* and *Enterobacter cloacae*.
9. The method of claim 4, wherein the contacting comprises a peptide in combination with at least one antibiotic or with lysozyme.
10. The method of claim 9, wherein the antibiotic is selected from the group consisting of aminoglycosides, penicillins, cephalosporins, carbapenems, monobactams, quinolones, tetracyclines, and glycopeptides.
11. The method of claim 10, wherein the antibiotic is selected from the group consisting of amikacin, gentamicin, kanamycin, netilmicin, tobramycin, streptomycin, azithromycin, clarithromycin, erythromycin, erythromycin estolate/ethylsuccinate/glucetate/lactobionate/stearate, penicillin G, penicillin V, methicillin, nafcillin, oxacillin, cloxacillin, dicloxacillin, ampicillin, amoxicillin, ticarcillin, carbenicillin, mezlocillin, azlocillin, piperacillin, cephalothin, cefazolin, cefaclor, cefamandole, cefoxitin, cefuroxime, cefonicid, cefmetazole, cefotetan, cefprozil, loracarbef, cefetamet, cefoperazone, cefotaxime, ceftizoxime, ceftriaxone, ceftazidime, cefepime, cefixime, cefpodoxime, cefsulodin, imipenem, aztreonam, fleroxacin, nalidixic acid, norfloxacin, ciprofloxacin, ofloxacin, enoxacin, lomefloxacin, cinoxacin, doxycycline, minocycline, tetracycline, vancomycin, chloramphenicol, clindamycin, trimethoprim, sulfamethoxazole, nitrofurantoin, rifampin and mupirocin and teicoplanin.

12. A method of inhibiting an endotoxemia or sepsis associated disorder in a subject having or at risk of having such a disorder, comprising administering to the subject a therapeutically effective amount of a peptide having an amino acid sequence selected from the group consisting of:
 

KWKSFIIKLTSAAKKVVTAKPLALIS	(SEQ ID NO:3);
KWKSFIIKLTKAACKVVTTAKKPLIV	(SEQ ID NO:4);
KWKKFIKSLTKSAAKTVVKTAKKPLIV	(SEQ ID NO:5);
KWKLFKKIGIGAVLKVLKVLTTGLPALKLTLK	(SEQ ID NO:6);
KLFFKKIGIGAVLKVLKVLTTGLPALKLTLK	(SEQ ID NO:7);
KWKFFKKIGIGAVLKVLKVLTTGLPALKLTLK	(SEQ ID NO:8);
KLWKLFFKKIGIGAVLKVLKVLTTGLPALKLTLK	(SEQ ID NO:9);
KWKSFIIKLTSAAKKVTTAAKPLTK	(SEQ ID NO:10);
KWKKFIKKIGIGAVLKVLTTGLPALKLTKK	(SEQ ID NO:11); and
KKWKKFIKKIGIGAVLTTPGAKK	(SEQ ID NO:12);

 and analogs, derivatives, amidated variations and conservative variations thereof.
13. The method of claim 12, wherein the disorder is septic shock.
14. The method of claim 12, wherein the peptide is administered in combination with at least one antibiotic or with lysozyme.
15. The method of claim 14, wherein the antibiotic is selected from the group consisting of aminoglycosides, penicillins, cephalosporins, carbapenems, monobactams, quinolones, tetracyclines, and glycopeptides.

16. The method of claim 15, wherein the antibiotic is selected from the group consisting of amikacin, gentamicin, kanamycin, netilmicin, tobramycin, streptomycin, azithromycin, clarithromycin, erythromycin, erythromycin estolate/ethylsuccinate-/gluceptate/lactobionate/stearate, penicillin G, penicillin V, methicillin, nafcillin, oxacillin, cloxacillin, dicloxacillin, ampicillin, amoxicillin, ticarcillin, carbenicillin, mezlocillin, azlocillin, piperacillin, cephalothin, cefazolin, cefaclor, cefamandole, cefoxitin, cefuroxime, cefonicid, cefmetazole, cefotetan, cefprozil, loracarbef, cefetamet, cefoperazone, cefotaxime, ceftizoxime, ceftriaxone, ceftazidime, cefepime, cefixime, cefpodoxime, cefsulodin, imipenem, aztreonam, fleroxacin, nalidixic acid, norfloxacin, ciprofloxacin, ofloxacin, enoxacin, lomefloxacin, cinoxacin, doxycycline, minocycline, tetracycline, vancomycin, chloramphenicol, clindamycin, trimethoprim, sulfamethoxazole, nitrofurantoin, rifampin, mupirocin and teicoplanin.

17. A method of inhibiting the growth of a eukaryotic cell comprising contacting the eukaryotic cell with an inhibiting effective amount of a peptide having an amino acid sequence selected from the group consisting of:

KWKLFKKIGIGAVLKVLTTGLPALKLTK	(SEQ ID NO:1);
KWKSFIKKLTAVKKVLTTGLPALIS	(SEQ ID NO:2);
KWKSFIKKLTSAAKKVVTAKPLALIS	(SEQ ID NO:3);
KWKSFIKKLTKAAKKVVTAKKPLIV	(SEQ ID NO:4);
KWKKFIKSLTKSAAKTVVKTAKKPLIV	(SEQ ID NO:5);
KWKLFKKIGIGAVLKVLKVLTTGLPALKLTLK	(SEQ ID NO:6);
KLFFKKIGIGAVLKVLKVLTTGLPALKLTLK	(SEQ ID NO:7);
KWKFFKKIGIGAVLKVLKVLTTGLPALKLTLK	(SEQ ID NO:8);
KLWKLFFKKIGIGAVLKVLKVLTTGLPALKLTLK	(SEQ ID NO:9);
KWKSFIKKLTSAAKKVTTAAKPLTK	(SEQ ID NO:10);
KWKKFIKKIGIGAVLKVLTTGLPALKLTKK	(SEQ ID NO:11);
KKWKKFIKKIGIGAVLTTPGAKK	(SEQ ID NO:12);
GWGSFFKKAAHVGKHHVGKAALTHYL	(SEQ ID NO:13);
GWGSFFKKAAHVGKHHVGKAALTHYL-NH <sub>2</sub>	(SEQ ID NO:14);
KGWGSFFKKAAHVGKHHVGKAALTHYL	(SEQ ID NO:15);
KGWGSFFKKAAHVGKHHVGKAALTHYL-NH <sub>2</sub>	(SEQ ID NO:16);
ALWKTMLKKAHVGKHHVGKAALTHYL-NH <sub>2</sub>	(SEQ ID NO:17);
SIGSAFKKAAHVGKHHVGKAALTHYL-NH <sub>2</sub>	(SEQ ID NO:18);
GWGSFFKKAAHVGKHHVGKAALGAAARRRK	(SEQ ID NO:19);
ALWKTMLKKAHVGKHHVGKAALGAAARRRK	(SEQ ID NO:20);
SIGSAFKKAAHVGKHHVGKAALGAAARRRK	(SEQ ID NO:21);
RQRVEELSKFSKKGAAARRRK	(SEQ ID NO:22);
ALWKTMLKKLGTMALHAGKAALGAAADTISQTQ	(SEQ ID NO:23); and
SIGSAFKKALPVAKKIGKAALPIAKAALP	(SEQ ID NO:24);

and analogs, derivatives, amidated variations and conservative variations thereof.

18. The method of claim 17, wherein the eukaryotic cell is an animal cell.

19. The method of claim 17, wherein the eukaryotic cell is a neoplastic cell.
20. The method of claim 19, wherein the neoplastic cell is a glioblastoma cell.
21. The method of claim 17, wherein the peptide is administered in combination with at least one chemotherapeutic agent.
22. The method of claim 21, wherein the chemotherapeutic agent is selected from the group consisting of bleomycin, neocarsinostatin, suramin, doxorubicin, taxol, mitomycin C and cisplatin.
23. A method of inhibiting a cell proliferation-associated disorder in a subject having or at risk of having such a disorder, comprising administering to the subject a therapeutically effective amount of a peptide having an amino acid sequence selected from the group consisting of:

KWKLFKKIGIGAVLKVLTTGLPALKLTK	(SEQ ID NO:1);
KWKSFIKKLTAVKKVLTTGLPALIS	(SEQ ID NO:2);
KWKSFIKKLTSAKKVVTTAKPLALIS	(SEQ ID NO:3);
KWKSFIKKLTAAKKVVTTAKKPLIV	(SEQ ID NO:4);
KWKKFIKSLTKSAAKTVVKTAKKPLIV	(SEQ ID NO:5);
KWKLFKKIGIGAVLKVLKVLTTGLPALKLTLK	(SEQ ID NO:6);
KLFFKKIGIGAVLKVLKVLTTGLPALKLTLK	(SEQ ID NO:7);
KWKFFKKIGIGAVLKVLKVLTTGLPALKLTLK	(SEQ ID NO:8);
KLWKLFKKIGIGAVLKVLKVLTTGLPALKLTLK	(SEQ ID NO:9);
KWKSFIKKLTSAKKVTTAAKPLTK	(SEQ ID NO:10);
KWKKFIKKIGIGAVLKVLTTGLPALKLTKK	(SEQ ID NO:11); and
KKWKKFIKKIGIGAVLTTPGAKK	(SEQ ID NO:12);

and analogs, derivatives, amidated variations and conservative variations thereof.



24. The method of claim 23, wherein the peptide is administered in combination with at least one chemotherapeutic agent.
25. The method of claim 24, wherein the chemotherapeutic agent is selected from the group consisting of bleomycin, neocarzinostatin, suramin, doxorubicin, taxol, mitomycin C and cisplatin.

26. A method for accelerating wound healing in a subject in need of such treatment comprising contacting the site of the wound with a therapeutically effective amount of a peptide having an amino acid sequence selected from the group consisting of:
- |  |                     |
|--|---------------------|
| KWKLFKKIGIGAVLKVLTTGLPALKLTK                   | (SEQ ID NO:1);      |
| KWKSFIKKLTAVKKVLTTGLPALIS                      | (SEQ ID NO:2);      |
| KWKSFIKKLTSAAKKVVTTAKPLALIS                    | (SEQ ID NO:3);      |
| KWKSFIKKLTKAAKKVVTTAKKPLIV                     | (SEQ ID NO:4);      |
| KWKKFIKSLTKSAAKTVVKTAKKPLIV                    | (SEQ ID NO:5);      |
| KWKLFKKIGIGAVLKVLKVLTTGLPALKLTLK               | (SEQ ID NO:6);      |
| KLFFKKIGIGAVLKVLKVLTTGLPALKLTLK                | (SEQ ID NO:7);      |
| KWKFFKKIGIGAVLKVLKVLTTGLPALKLTLK               | (SEQ ID NO:8);      |
| KLWKLFFKKIGIGAVLKVLKVLTTGLPALKLTLK             | (SEQ ID NO:9);      |
| KWKSFIKKLTSAAKKVTTAAKPLTK                      | (SEQ ID NO:10);     |
| KWKKFIKKIGIGAVLKVLTTGLPALKLTKK                 | (SEQ ID NO:11);     |
| KKWKKFIKKIGIGAVLTTPGAKK                        | (SEQ ID NO:12);     |
| GWGSFFKKA AHVKGK HVGKAAL THYL                  | (SEQ ID NO:13);     |
| GWGSFFKKA AHVKGK HVGKAAL THYL-NH <sub>2</sub>  | (SEQ ID NO:14);     |
| KGWGSFFKKA AHVKGK HVGKAAL THYL                 | (SEQ ID NO:15);     |
| KGWGSFFKKA AHVKGK HVGKAAL THYL-NH <sub>2</sub> | (SEQ ID NO:16);     |
| ALWKTMLKKA AHVKGK HVGKAAL THYL-NH <sub>2</sub> | (SEQ ID NO:17);     |
| SIGSAFKKA AHVKGK HVGKAAL THYL-NH <sub>2</sub>  | (SEQ ID NO:18);     |
| GWGSFFKKA AHVKGK HVGKAALGAAARRRK               | (SEQ ID NO:19);     |
| ALWKTMLKKA AHVKGK HVGKAALGAAARRRK              | (SEQ ID NO:20);     |
| SIGSAFKKA AHVKGK HVGKAALGAAARRRK               | (SEQ ID NO:21);     |
| RQRVEELSKFSKKGAAARRRK                          | (SEQ ID NO:22);     |
| ALWKTMLKKLGTMALHAGKAALGAAADTISQTQ              | (SEQ ID NO:23); and |
| SIGSAFKKALPVAKKIGKAALPIAKAALP                  | (SEQ ID NO:24);     |
- and analogs, derivatives, amidated variations and conservative variations thereof.

27. The method of claim 26, further comprising contacting the site of the wound with an agent which promotes wound healing.
28. The method of claim 27, wherein the agent is transforming growth factor beta (TGF- $\beta$ ).
29. A transgenic non-human animal having a transgene encoding an antimicrobial cationic peptide chromosomally integrated into the somatic and germ cells of the animal.
30. The transgenic non-human animal of claim 29, wherein the animal is a fish.
31. The transgenic non-human animal of claim 30, wherein the fish is selected from the group consisting of salmonids, scombrids, portunids, pleuronectids, lutjanids and ictalurids.
32. The transgenic non-human animal of claim 29, wherein the transgene encodes an antimicrobial cationic peptide selected from the group consisting of:
- |                             |                     |
|-----------------------------|---------------------|
| KGWGSFFKKAHVGVGKAALTHYL     | (SEQ ID NO:15);     |
| ALWKTMLKKAHVGVGKAALTHYL     | (SEQ ID NO:17);     |
| SIGSAFKKAHVGVGKAALTHYL      | (SEQ ID NO:18);     |
| GWGSFFKKAHVGVGKAALGAAARRRK  | (SEQ ID NO:19);     |
| ALWKTMLKKAHVGVGKAALGAAARRRK | (SEQ ID NO:20); and |
| SIGSAFKKAHVGVGKAALGAAARRRK  | (SEQ ID NO:21);     |
- and analogs, derivatives, amidated variations and conservative variations thereof.

33. A method for producing a transgenic fish having a phenotype characterized by expression of a transgene encoding an antimicrobial cationic peptide otherwise not naturally occurring in the transgenic fish, comprising:
  - a) introducing a transgene in operable linkage with at least one fish expression regulatory sequence into an embryo;
  - b) transplanting the embryo of a) into a pseudopregnant fish;
  - c) allowing the embryo to develop to term; and
  - d) identifying at least one transgenic offspring from c).
34. The method of claim 33, wherein the introduction of the transgene into the embryo is by infecting the embryo with a virus containing the transgene.
35. The method of claim 34, wherein the virus is a retrovirus.
36. The method of claim 33, wherein the transgene encodes an antimicrobial cationic peptide selected from the group consisting of:

KGWGSFFKKA AHVKGKHVGKAALTHYL	(SEQ ID NO:15);
ALWKTMLKKA AHVKGKHVGKAALTHYL	(SEQ ID NO:17);
SIGSAFKKA AHVKGKHVGKAALTHYL	(SEQ ID NO:18);
GWGSFFKKA AHVKGKHVGKAALGAAARRRK	(SEQ ID NO:19);
ALWKTMLKKA AHVKGKHVGKAALGAAARRRK	(SEQ ID NO:20);
SIGSAFKKA AHVKGKHVGKAALGAAARRRK	(SEQ ID NO:21);

and analogs, derivatives, amidated variations and conservative variations thereof.
37. The method of claim 33, wherein the fish is selected from the group consisting of salmonids, scombrids, portunids, pleuronectids, lutjanids and ictalurids.

38. A method of inhibiting the growth of bacteria comprising contacting the bacteria with an inhibiting effective amount of a peptide having an amino acid sequence selected from the group consisting of:

GWGSFFKKAAHVGKHHVGKAALTHYL-NH <sub>2</sub>	(SEQ ID NO:14);
KGWGSFFKKAAHVGKHHVGKAALTHYL	(SEQ ID NO:15);
KGWGSFFKKAAHVGKHHVGKAALTHYL-NH <sub>2</sub>	(SEQ ID NO:16);
ALWKTMLKKAAHVGKHHVGKAALTHYL-NH <sub>2</sub>	(SEQ ID NO:17);
SIGSAFKKAAHVGKHHVGKAALTHYL-NH <sub>2</sub>	(SEQ ID NO:18);
GWGSFFKKAAHVGKHHVGKAALGAAARRRK	(SEQ ID NO:19);
ALWKTMLKKAAHVGKHHVGKAALGAAARRRK	(SEQ ID NO:20);
SIGSAFKKAAHVGKHHVGKAALGAAARRRK	(SEQ ID NO:21);

and analogs, derivatives, amidated variations and conservative variations thereof.

39. An isolated polynucleotide which encodes a peptide of claim 38.

40. An isolated polynucleotide which encodes a peptide selected from the group consisting of:

GWGSFFKKAAHVGKHHVGKAALTHYL-NH <sub>2</sub>	(SEQ ID NO:14);
KGWGSFFKKAAHVGKHHVGKAALTHYL	(SEQ ID NO:15);
KGWGSFFKKAAHVGKHHVGKAALTHYL-NH <sub>2</sub>	(SEQ ID NO:16);
ALWKTMLKKAAHVGKHHVGKAALTHYL-NH <sub>2</sub>	(SEQ ID NO:17);
SIGSAFKKAAHVGKHHVGKAALTHYL-NH <sub>2</sub>	(SEQ ID NO:18);
GWGSFFKKAAHVGKHHVGKAALGAAARRRK	(SEQ ID NO:19);
ALWKTMLKKAAHVGKHHVGKAALGAAARRRK	(SEQ ID NO:20);
SIGSAFKKAAHVGKHHVGKAALGAAARRRK	(SEQ ID NO:21).

41. A method of inhibiting the growth of bacteria comprising contacting the bacteria with an inhibiting effective amount of a peptide having an amino acid sequence selected from the group consisting of:

GWGSFFKKAAHVGKHVGKAALTHYL-NH2	(SEQ ID NO:14);
KGWGSFFKKAAHVGKHVGKAALTHYL	(SEQ ID NO:15);
KGWGSFFKKAAHVGKHVGKAALTHYL-NH2	(SEQ ID NO:16);
ALWKTMLKKAAHVGKHVGKAALTHYL-NH2	(SEQ ID NO:17);
SIGSAFKKAAHVGKHVGKAALTHYL-NH2	(SEQ ID NO:18);
GWGSFFKKAAHVGKHVGKAALGAAARRRK	(SEQ ID NO:19);
ALWKTMLKKAAHVGKHVGKAALGAAARRRK	(SEQ ID NO:20);
SIGSAFKKAAHVGKHVGKAALGAAARRRK	(SEQ ID NO:21);

and analogs, derivatives, amidated variations and conservative variations thereof.

42. A method of treating a respiratory or pulmonary associated infection or disorder in a subject having or at risk of having such an infection or disorder, comprising administering to the subject a therapeutically effective amount of a peptide having an amino acid sequence selected from the group consisting of:

KWKLFKKIGIGAVLKVLTTGLPALKLTK	(SEQ ID NO:1);
KWKSFIKKLTAVKKVLTTGLPALIS	(SEQ ID NO:2);
KWKSFIKKLTSAKKVVTTAKPLALIS	(SEQ ID NO:3);
KWKSFIKKLTAAKKVVTTAKKPLIV	(SEQ ID NO:4);
KWKKFIKSLTKSAAKTVVKTAKKPLIV	(SEQ ID NO:5);
KWKLFKKIGIGAVLKVLKVLTTGLPALKLTLK	(SEQ ID NO:6);
KLFFKKIGIGAVLKVLKVLTTGLPALKLTLK	(SEQ ID NO:7);
KWKFFKKIGIGAVLKVLKVLTTGLPALKLTLK	(SEQ ID NO:8);
KLWKLFFKKIGIGAVLKVLKVLTTGLPALKLTLK	(SEQ ID NO:9);
KWKSFIKKLTSAKKVTTAAKPLTK	(SEQ ID NO:10);
KWKKFIKKIGIGAVLKVLTTGLPALKLTKK	(SEQ ID NO:11);
KKWKKFIKKIGIGAVLTPGAKK	(SEQ ID NO:12);
GWGSFFKKAAHVGKHHVGKAALTHYL	(SEQ ID NO:13);
GWGSFFKKAAHVGKHHVGKAALTHYL-NH2	(SEQ ID NO:14);
KGWGSFFKKAAHVGKHHVGKAALTHYL	(SEQ ID NO:15);
KGWGSFFKKAAHVGKHHVGKAALTHYL-NH2	(SEQ ID NO:16);
ALWKTMLKAAHVGKHHVGKAALTHYL-NH2	(SEQ ID NO:17);
SIGSAFKKAAHVGKHHVGKAALTHYL-NH2	(SEQ ID NO:18);
GWGSFFKKAAHVGKHHVGKAALGAAARRRK	(SEQ ID NO:19);
ALWKTMLKAAHVGKHHVGKAALGAAARRRK	(SEQ ID NO:20);
SIGSAFKKAAHVGKHHVGKAALGAAARRRK	(SEQ ID NO:21);
RQRVEELSKFSKKGAAARRRK	(SEQ ID NO:22);
ALWKTMLKKLGTMLHAGKAALGAAADTISQTQ	(SEQ ID NO:23); and
SIGSAFKKALPVAKKIGKAALPIAKAALP	(SEQ ID NO:24);

and analogs, derivatives, amidated variations and conservative variations thereof.

43. The method of claim 42, wherein the disorder is cystic fibrosis.
44. The method of claim 43, wherein the peptide is administered in combination with at least one antibiotic or with lysozyme.
45. The method of claim 44, wherein the antibiotic is selected from the group consisting of aminoglycosides, penicillins, cephalosporins, carbapenems, monobactams, quinolones, tetracyclines, and glycopeptides.
46. The method of claim 45, wherein the antibiotic is selected from the group consisting of amikacin, gentamicin, kanamycin, netilmicin, tobramycin, streptomycin, azithromycin, clarithromycin, erythromycin, erythromycin estolate/ethylsuccinate-/gluceptate/lactobionate/stearate, penicillin G, penicillin V, methicillin, nafcillin, oxacillin, cloxacillin, dicloxacillin, ampicillin, amoxicillin, ticarcillin, carbenicillin, mezlocillin, azlocillin, piperacillin, cephalothin, cefazolin, cefaclor, cefamandole, cefoxitin, cefuroxime, cefonicid, cefmetazole, cefotetan, cefprozil, loracarbef, cefetamet, cefoperazone, cefotaxime, ceftizoxime, ceftriaxone, ceftazidime, cefepime, cefixime, cefpodoxime, cefsulodin, imipenem, aztreonam, fleroxacin, nalidixic acid, norfloxacin, ciprofloxacin, ofloxacin, enoxacin, lomefloxacin, cinoxacin, doxycycline, minocycline, tetracycline, vancomycin, chloramphenicol, clindamycin, trimethoprim, sulfamethoxazole, nitrofurantoin, rifampin, mupirocin and teicoplanin.